

FOR OFFICIAL USE ONLY
NOT FOR PUBLICATION

CDC INFLUENZA REPORT
NO. 6 JULY 25, 1957

U. S. Department of Health, Education, and Welfare
Public Health Service Bureau of State Services
Communicable Disease Center
Robert J. Anderson, Chief

Keith E. Jensen, Ph. D.
CDC Virus and Rickettsia Section*
P. O. Box 61
Montgomery 1, Alabama
Telephone No. AMherst 3-4468

Robert H. Drachman, M. D.
Frederick L. Dunn, M. D.
Influenza Surveillance Unit
Communicable Disease Center
50 Seventh Street, N. E.
Atlanta 23, Georgia
Telephone No. TRinity 6-3311
Extension 5455

*Serving as WHO International
Influenza Center for the Americas

SPECIAL NOTE

Information contained in this report is a summary of data reported to CDC by State Health Departments, Epidemic Intelligence Service Officers, National Office of Vital Statistics, collaborating influenza diagnostic laboratories, and other pertinent sources. Much of it is preliminary in nature and is primarily intended for those involved in influenza control activities. It is understood that the contents of these reports will not be released to the press, except by the Office of the Surgeon General, Public Health Service, U. S. Department of Health, Education, and Welfare. State Health Officers, of course, will judge the advisability of releasing any information from their own states.

Table of Contents

- I. Summary of Information
- II. Epidemic and Case Reports
- III. Progress Reports
- IV. Influenza Virus Studies
- V. Summary Tables - Cases and Outbreaks

I. Summary of Information

The first isolation of Asian strain influenza virus from the southern tier of states has been reported from Corpus Christi. Airmen recently arrived from San Diego were initially involved. Confirmation of Asian strain influenza virus was also obtained from a ship at Norfolk, Virginia.

Several outbreaks of influenza-like illness have been reported among homeward-bound Boy Scouts from the Jamboree. Crowding in railroad coaches again appears to have served as a "provoking factor" for these outbreaks. Three California groups have been most heavily affected, with sporadic cases reported among others.

An outbreak of influenza-like illness has appeared among Mexican National migrant workers in California. Only a small group is presently affected. One hundred thousand are present in the state, living primarily in crowded, poorly sanitized labor camps.

"Asian" has been suggested at a meeting in Geneva as a more exact designation for the recently isolated strains of influenza virus. Delegates from various countries thought the previous term "Far East" not exact as to geographical location.

II. Epidemic and Case Reports

6-A. VIRGINIA, Norfolk

(Reported by Capt. John R. Seal, MC, Division of Preventive Medicine, U. S. Navy, and CDC Virus and Rickettsia Laboratory, Montgomery, Alabama.)

The Pakistani ship Mahmood left Karachi on April 14 for Boston and Newport, Rhode Island. From May 31 through June 13 it remained at Newport. These dates coincide with previously reported (CDC Influenza Report No. 1-B, 2-G) outbreaks of influenza aboard naval vessels in the same area. The Mahmood arrived in Norfolk, Virginia, on June 15. Through June 23 at least 5 cases of influenza appeared on board, with isolates of Asian strain influenza virus from two.

NOTE: This is the first confirmation of Asian strain influenza at Norfolk. Previously, confusion may have resulted from positive specimens having been processed through USN Preventive Medicine Unit No. Two at Norfolk. These previous Asian strain isolates came from ships operating in the Atlantic but attached to the Newport, Rhode Island, Naval Base.

III. Progress Reports

6-B. TEXAS, Corpus Christi

(Reported by Lt. Col. H. E. Griffin, Preventive Medicine Division, Department of the Army.)

Asian strain influenza virus has been isolated by the 4th Army

Regional Medical laboratory from cases at the Naval Air Station. About 33 illnesses have occurred on the base, with the earliest cases among a group from San Diego, California.

6-C. WASHINGTON, Seattle

(Reported by Dr. W. R. Giedt, Washington State Department of Health, and Dr. R. Ravenholt, Seattle-King County Health Department.)

The military transport which arrived in Seattle on July 18 (see CDC Influenza Report 5-B) had come from Korea and Yokohama, Japan. Among 1600 passengers and 400 crew, there were about 300 cases of a febrile, 2-3 day respiratory illness during the voyage. On the ship's arrival, there were 18 active cases, including 4 cases with onsets only 24 hours before docking. All but one of these cases were hospitalized. Throat washings and blood specimens are under laboratory study.

6-D. RHODE ISLAND, Newport

(Reported by Capt. John R. Seal, MC, USN Preventive Medicine Division, and CDC Virus and Rickettsia Laboratory, Montgomery, Alabama.)

Isolations of Asian strain influenza virus have been obtained from two additional ships berthed at Newport (CDC Influenza Report No. 1-B). Throat washings were obtained in mid-June from crew members aboard the U.S.S. M. J. Manuel and U.S.S. Greenwood. Both ships were in fairly close contact with the U.S.S. Barry, which suffered a significant outbreak of Asian strain influenza at that time. Earliest cases aboard the U.S.S. Manuel occurred among engine room personnel, who lived in rather crowded quarters.

6-E. BOY SCOUT JAMBOREE

A number of outbreaks of influenza-like illness have appeared among Boy Scout groups returning from the Jamboree at Valley Forge, Pennsylvania. Since July 18, the final day of the Jamboree, cases have been reported from Louisiana, Connecticut, Massachusetts, South Carolina, Virginia, and Wyoming-Montana. These are tabulated in Table V.

Dr. J. D. Martin, Louisiana State Department of Health, has reported that 27 scouts were ill on a special train which passed through New Orleans, bound for California. Of the 319 scouts on the train, many apparently suffered mild illness en route from Valley Forge to Louisiana. The scouts were members of Hawaii and Southern California (excluding Los Angeles) troops.

Dr. Mila Rindge, Connecticut State Health Department, reports that one scout, of some 700 at the Jamboree from Connecticut, has developed a febrile respiratory illness since return to the state. Dr. G. E. McDaniel, South Carolina State Health Department, reports a single case of respiratory illness in a Marion County scout recently returned from the Jamboree. Blood specimens are being collected. Dr. A. L. Gray,

Mississippi State Board of Health, reports a number of cases of febrile respiratory illness in returned scouts. Details on these are not yet available. Dr. Mason Romaine, Virginia State Health Department, has reported that two scouts, en route by train from Valley Forge to Baton Rouge, Louisiana, stopped in Roanoke, Virginia, because of influenza-like illness. Throat washings have been forwarded to CDC.

According to Capt. J. R. Seal, Preventive Medicine Division, USN, in a group of about 300 California scouts en route home by train via New England, there have been at least 46 cases. These were hospitalized at the U. S. Navy barracks in Boston, Massachusetts, while the remainder of the group visited the Submarine Base at New London, Connecticut. Apparently 16 of the scouts were ill at time of departure from Valley Forge.

Dr. F. D. Yoder, Wyoming State Department of Public Health, and Dr. G. D. Carlyle Thompson, Montana State Board of Health, report a sharp outbreak on a San Francisco-bound train carrying home 360 scouts. The scouts represent six California counties--San Mateo, Santa Clara, Richmond, Marin, Monterey, and Santa Cruz. There had been no illness in any of the troops on the trip East. The attack rate on the train was at least 50%. Signs and symptoms included headache, fever, cough, malaise, and sore, red throat. Apparently the affected scouts remained in the train at Gardiner, Montana, while a large number of the boys made a bus tour of Yellowstone Park.

Dr. Maurice Hilleman, Walter Reed Army Institute of Research, has demonstrated a positive diagnostic reaction with an Asian strain influenza virus isolate and a convalescent serum specimen from an adult Boy Scout leader at Valley Forge. This isolate had been obtained from the same patient's throat washings during the acute illness.

6-F. CALIFORNIA, Monterey County

(Reported by Dr. P. K. Condit, California Department of Public Health.)

Influenza-like illnesses have appeared among workers (Mexican nationals) near Salinas, California. In one group a sudden upswing in cases occurred on July 23, whereas previous illnesses were only sporadic. Symptomatology is reported to be characteristic of influenza, with duration of illness being two to three days. About 100,000 migrant workers are housed in labor camps around the state. Sanitation and housing are rather suboptimal in most camps.

IV. Influenza Virus Studies

An egg-animal-line of A/Japan 305/57 has been adapted and grown at the Influenza Virus Center in Montgomery and it shows greatly enhanced sensitivity in the hemagglutination-inhibition test. Troublesome nonspecific inhibitor is removed from sera tested with this antigen by periodate treatment. More details of this modified antigen will be forthcoming in the near future.

"Asian" has been proposed as the designation for the newly isolated strains of influenza virus. This was suggested at an ad hoc meeting on influenza in Geneva during the recent International Poliomyelitis Conference. The term "Far East" was objected to as not being specific in its geographical connotations.

As noted previously, many more positive sera may be identified with the complement-fixation test than with the hemagglutination-inhibition test, which may give equivocal results. In vaccination trials this difference has been quite marked. Many more individuals with antibody rises have been detected by C-F tests than with H-I determinations. Probably, both should be done with the new strains until their serology is better defined.

Seventy-two serum specimens obtained from old people in Massachusetts by Dr. Roy Feemster, Massachusetts Department of Health, have been tested for antibodies to Asian strains of influenza virus at the CDC Montgomery laboratory (CDC Virus and Rickettsia Section and WHO Influenza Center for the Americas, Montgomery, Alabama). A very significant number of sera showed diagnostic antibody levels. Dr. Maurice Hilleman, Walter Reed Army Institute of Research, has confirmed the presence of Asian strain antibodies in the sera of two 84-year-old people from the Netherlands. Dr. J. Mulder, Leiden, The Netherlands, originally reported the presence of these antibodies in old people and sent the specimens to Dr. Hilleman. The inference is made from these findings that the influenza virus responsible for the 1889-90 pandemic was related to the present Asian strains. Previous reports of negative findings from England and this country may be due to the chance selection of oldsters who were not in heavily affected areas during the 1889-90 pandemic. New England apparently suffered considerably during the pandemic, which may account for the present striking results.

Diagnostic services for influenza

As presently understood, state health authorities or their representatives, may approach collaborating laboratories in the WHO Influenza Study Program with a request to process specimens from patients with influenza-like illness. Where these laboratories are not able to accept the specimens at that time, the regional reference laboratory should be contacted. If this laboratory finds it impossible to examine the specimens, they may be sent to the CDC Virus and Rickettsia Diagnostic Unit, Box 185, Chamblee, Georgia. It is earnestly requested that specimens be accompanied by all pertinent information, including possible source of the infection, health officer conducting further epidemiologic study, when convalescent blood will be sent, etc.

* * * * *

NOTE: Dr. P. K. Condit, California State Department of Public Health, reports the isolation of Asian strain influenza virus from specimens obtained from the boys' camp previously reported in San Mateo County (CDC Influenza Report 1-F).

V. Summary Tables - Cases and Outbreaks

TABLE I

Confirmed Outbreaks and Cases of Influenza due to Far East Strains, United States
June 1--July 25, 1957

Dates of Outbreaks	Location	Type of Population	Population at Risk	No. with Influenza-like Illnesses	Deaths	Laboratory Diagnosis by Virus Isolation	Serology	CDC Influenza Report Number
May 20-- June 18	CALIFORNIA San Francisco	Ships from Far East	c.9500	800+	1		Yes	1-A
Early June	RHODE ISLAND Newport	Crews of several Naval vessels	?	Attack rates 18-45%	0	Yes		1-B 2-C
Mid-June	CALIFORNIA San Diego	Naval Training Station Recruits Station Personnel	c.4500 c.6600	3059 753	0 0	Yes (5-21-57)		1-C
June 5-11	CALIFORNIA San Diego	Crew of Naval vessel	130	78	0	Yes		1-C
June	HAWAII	Military personnel Military dependents Civilians	?	527+ 103+ 300+	0 0 0		Yes	1-E
Late June	CALIFORNIA Monterey	Fort Ord Army Base Army Personnel	?	4000+	1	Yes	Yes	1-H 2-F
Mid-June	OHIO Cleveland	Military man from Far East	Single case		0	Yes		1-D
June 24	OHIO Cleveland	Hospital orderly Young female	Single case Single case		0 0	Yes	Yes	2-A 4-F
June 17-25	CALIFORNIA Davis	High school girls and adult leaders	391 24	224+ 4	0 1	Yes	Yes	1-G
June 26-- July 2	IOWA Grinnell	College students and adult leaders	1688	200+	0	Yes	Yes	1-J
July 1-5	UTAH Salt Lake City	High school students dents	37 64	30 11	0 0	Yes		1-K 2-E
July 5	KENTUCKY Louisville	Exposed residents Traveller from the Philippines	Single case		0	Yes		3-A
July 11-18	PENNSYLVANIA Valley Forge	International Boy Scout Jamboree	53,000	c.1000	0	Yes		3-D 5-F

TABLE I (Continued)

Dates of Outbreaks	Location	Type of Population	Population at Risk	No. with Influenza-like Illnesses	Deaths	Laboratory Diagnosis by		CDC Influenza Report Number
						Virus Isolation	Serology	
July 11-13	KENTUCKY Morris Fork	Isolated encampment	24	12	0	Yes		4-C 5-E
June 19-23	VIRGINIA Norfolk	Pakistani ship previously at Newport, Rhode Island	?	57	0	Yes	Yes	6-A
Early July	TEXAS Corpus Christi	Naval Air Station	?	33	0	Yes		5-C 6-B

TABLE II

Unconfirmed Influenza-like Illness, Outbreaks - United States
June 1 - July 25, 1957

Dates of Outbreaks	Location	Type of Population	Population at Risk	No. with Influenza-like Illnesses	Deaths	Specimens Obtained		CDC Influenza Report Number
						Throat Washings	Blood	
June 20-25	CALIFORNIA San Mateo Co.	Boys camp 15-17 year olds	53	36	0	Yes	Yes	1-F
May 29 - June 7 June 16	CALIFORNIA Solano Co.	Mare Island Naval Yard - Marines Crew of cruiser moored in harbor	75 ?	38 187	1 from bacterial pneumonia	Yes	Yes	1-I
June 22 - early July Mid-July	CALIFORNIA Oceanside CALIFORNIA Fresno, Sonoma, Los Angeles Counties	Camp Pendleton Marine recruits Three summer children's camps	40,000 800	2511 c.100	0 0	Yes	Yes	2-D 3-E
July 8-12	CALIFORNIA Los Angeles	City Jail	?	67	0	Yes	Yes	3-F
Early July	CALIFORNIA Santa Clara	Juvenile Hall, teen-age boys and girls	60	37	0	Yes	Yes	4-A
Mid-July	LOUISIANA Grant Parish	Boys camp	60	30-35	0	Yes	Yes	4-B
June 26 - early July July 4-19	ILLINOIS Champaign Co. WASHINGTON Fort Lewis	Air Force Base Military Personnel	? ?	6107 c.250	0 0	? Yes	? ?	4-D 5-A
July 17	WASHINGTON Seattle	Military transport arriving from the Orient	2000 crew and passengers	302 en route, 18 on arrival	0	Yes	Yes	5-B 6-C

TABLE III

Outbreaks of Febrile Respiratory Disease - Etiology Other Than Influenza or No Specimens Obtainable
June 1 - July 25, 1957

Date of Outbreaks	Location	Type of Population	Population at Risk	No. with Influenza-like Illnesses	Deaths	Specimens Obtained		CDC Influenza Report Number
						Throat Washings	Blood	
Early July	MISSOURI Columbia	Townpeople	?	200+	0	Yes Negative for in- fluenza	Yes	1-L
Late June	CALIFORNIA San Mateo, Santa Cruz, Sonoma, Tuolumne, and Plumas Counties	14 summer chil- dren's camps (in- cludes 7 camps previously re- ported under 1-M)	c.1530	c.270	0	0	0	1-M 4-E

TABLE IV. Reported Influenza-Like Illness among Returning Delegates from Grinnell (Iowa) Conference
Through July 25, 1957

Date of Illness (Reported)	Location	Number Ill After Conference	Number of Second- ary Cases in Contacts	Laboratory Confir- mation Far East Strain Influenza	CDC Influenza Report Number
June 26--July 2 July 5	Grinnell, Iowa	(2007 of 1688 ill at conference)	-	Yes	1-J
	KENTUCKY	24	-	Yes	2-B
	Louisville Lexington				
Early July	INDIANA	27	-	No	2-C
	Indianapolis Evansville				
Early July	ILLINOIS	67	-	No	-
	Decatur, Edwards- ville, Peoria, Chicago				
Mid-July	NEW MEXICO	37	1	No	3-B
	Las Vegas				
Mid-July	CONNECTICUT	3	1	No	3-C
Mid-July	NEW YORK	4	2	No	5-D
Mid-July	MINNESOTA	15	-	No	-
Mid-July	COLORADO	1	-	No	-
	Denver				
Mid-July	NORTH CAROLINA	3	4	No	-
Mid-July	MARYLAND	1	-	No	-

TABLE V. Reported Outbreaks of Influenza-like Illness among Boy Scouts Returning from Jamboree Through July 25, 1957
(See CDC Influenza Progress Report 6-E)

Date of Report	Final Destination of Group	Mode of Transportation	Number Ill	Illness En Route Home	Illness after Arrival	Reported From
July 23	Southern California and Hawaii, except Los Angeles	Train	27	Yes	--	Louisiana
July 23	Connecticut	Train	1	-	Yes	Connecticut
July 23	San Francisco via New England	Train	467	Yes	--	Boston and New London, Conn.
July 23	South Carolina	Train	1	-	Yes	Marion County, South Carolina
July 24	Baton Rouge, Louisiana	Train	2	Yes	--	Roanoke, Va.
July 25	San Francisco	Train	2007	Yes	--	Yellowstone, Wyo. and Mon- tana
July 25	Jackson, Mississippi	Train	?	-	Yes	Mississippi